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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,557	02/13/2001	Vieri Vanghi	4740-003	9662

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EXAMINER
MILORD, MARCEAU

ART UNIT	PAPER NUMBER
2682	4

DATE MAILED: 08/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/782,557	VANGHI, VIERI	
	Examiner	Art Unit	
	Marceau Milord	2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on *13 February 2001* is: a)☐ approved b)☒ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rinne et al (US Patent No 6574473 B2) in view of Mustajarvi et al (US Patent No 6512756 B1) and Virtanen (US Patent No 6249681 B1).

Regarding claims 1-5, 10, Rinne et al discloses a method of managing radio network access in an access terminal (figs. 3- 4 and fig. 6), the method comprising: establishing (RNC and BS of fig. 4) a connection with a first radio network (col. 5, lines 35- 55; col. 7, lines 34-67); suspending communication with said first radio network to communicate with a second radio network (col. 5, line 46- col. 6, line 21; col. 8, lines 1- 29); monitoring (RNC0 of figs. 13-14) the time communication with said first radio network is suspended while communicating with said second radio network (col. 13, line 31- col. 14, line 28; col. 16, lines 32- 67).

However, Ronnie et al does not specifically disclose the steps of resuming communication with said first radio network using said previously established connection with said first radio network if the duration of suspended communication does not exceed a maximum suspension time; and requesting a new connection with said first radio network if the duration of suspended communication exceeds said maximum suspension time.

On the other hand, Virtanen, from the same field of endeavor, discloses a technique for re-establishing an interrupted data packet call on a channel between two transceiving devices in a telecommunications system. Information in the re-establishment message is used to retrieve the call configuration that was saved upon call release. The call is then re-established using the information in the re-establishment message and the retrieved information (col. 3, lines 40- 67; col. 4, lines 4- 67; col. 5, lines 1-15). Furthermore, Virtanen shows re-initiation of packet data transmission after the idle time expires and before the terminate time expires (figs. 3A-3C; col. 8, lines 22-56). In addition, the re-establish timer determines how long call configuration information is saved, without either the MS 10 or MSC 34 initiating re-establishment, after a call is released with a re-establishment possible indication in the call release message (col. 10, lines 23- 62).

Mustajarvi et al also discloses a method for updating a routing area in a packet radio network. When the packet radio node detects a routing area update carried out by an unknown mobile station, it initiates the establishment of a logical link by sending a link establishment message (LLC) to the mobile station. Such LLC link parameters include the maximum delay of the acknowledgement response of a data frame, maximum number of retransmissions of a frame, maximum number of octets in the information field of a frame, and maximum number of sent unacknowledged frames (col. 5, lines 34- 64; col. 6, lines 13- 37; col. 8, lines 23- 37; col. 10, lines 15- 50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Mustajarvi to the modified system of Virtanen and Rinne in order to allow an interrupted packet data call to be re-established from either one of a pair of transceiving devices communicating in the packet data call.

Regarding claim 6, Rinne et al as modified discloses a method of managing radio network access in an access terminal (figs. 3- 4 and fig. 6) wherein said access terminal requests a new connection with said first radio network by transmitting a connection request message to said first radio network (col. 9, lines 7- 54; col. 10, lines 1- 36).

Regarding claim 7, Rinne et al as modified discloses a method of managing radio network access in an access terminal (figs. 3- 4 and fig. 6) wherein said connection request message transmitted by said mobile terminal to said first radio network includes a dropped call indication to notify said first radio network that a previously established connection with said first radio network was terminated (col. 8, lines 1- 51; col. 9, lines 11- 54).

Regarding claim 8, Rinne et al as modified discloses a method of managing radio network access in an access terminal (figs. 3- 4 and fig. 6) wherein said first radio network comprises an IS-856 radio network (col. 2, lines 34- 64).

Regarding claim 9, Rinne et al as modified discloses a method of managing radio network access in an access terminal (figs. 3- 4 and fig. 6) wherein said second radio network comprises an IS-2000 radio network (fig. 3; col. 2, line 65- col. 3, line 41).

Regarding claims 11-15, Rinne et al discloses a method of managing radio network access in a radio network (figs. 3- 4 and fig. 6), said method comprising: establishing (RNC and BS of fig. 4) a connection with an access terminal (col. 5, lines 35- 55; col. 7, lines 34- 67).

However, Ronnie et al does not specifically disclose the step of transmitting a maximum suspension time to said access terminal to indicate the maximum allowed suspension time.

On the other hand, Virtanen, from the same field of endeavor, discloses a technique for re-establishing an interrupted data packet call on a channel between two transceiving devices in a telecommunications system. Information in the re-establishment message is used to retrieve the call configuration that was saved upon call release. The call is then re-established using the information in the re-establishment message and the retrieved information (col. 3, lines 40- 67; col. 4, lines 4- 67; col. 5, lines 1-15). Furthermore, Virtanen shows re-initiation of packet data transmission after the idle time expires and before the terminate time expires (figs. 3A-3C; col. 8, lines 22-56). In addition, the re-establish timer determines how long call configuration information is saved, without either the MS 10 or MSC 34 initiating re-establishment, after a call is released with a re-establishment possible indication in the call release message (col. 10, lines 23- 62).

Mustajarvi et al also discloses a method for updating a routing area in a packet radio network. When the packet radio node detects a routing area update carried out by an unknown mobile station, it initiates the establishment of a logical link by sending a link establishment message (LLC) to the mobile station. Such LLC link parameters include the maximum delay of the acknowledgement response of a data frame, maximum number of retransmissions of a frame, maximum number of octets in the information field of a frame, and maximum number of sent unacknowledged frames (col. 5, lines 34- 64; col. 6, lines 13- 37; col. 8, lines 23- 37; col. 10, lines 15- 50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Mustajarvi to the modified system of Virtanen and Rinne in order to allow an interrupted packet data call to be re-established from either one of a pair of transceiving devices communicating in the packet data call.

Regarding claim 16, Rinne et al as modified discloses a method of managing radio network access in a radio network (figs. 3- 4 and fig. 6), comprising receiving a connection request from said access terminal to establish a new connection following termination of an earlier connection (col. 5, lines 14- 55; col. 8, lines 25- 51).

Regarding claim 17, Rinne et al as modified discloses a method of managing radio network access in a radio network (figs. 3- 4 and fig. 6), wherein said connection request received from said access terminal includes a dropped call indication notifying said radio network that said earlier connection with said access terminal was terminated (col. 8, lines 1- 51; col. 9, lines 11- 54).

Regarding claim 18, Rinne et al as modified discloses a method of managing radio network access in a radio network (figs. 3- 4 and fig. 6), comprising giving said access terminal priority access to said first radio network if said connection request includes a dropped call indication (col. 9, lines 7- 40; col. 10, lines 4- 36).

Regarding claim 19, Rinne et al as modified discloses a method of managing radio network access in a radio network (figs. 3- 4 and fig. 6), wherein said radio network comprises an IS-856 radio network (col. 2, lines 34- 64).

Regarding claims 20-24, Rinne et al discloses a method of managing radio network access in a radio network (figs. 3- 4 and fig. 6), the method comprising: establishing (RNC and BS of fig. 4) a connection between an access terminal and a first radio network (col. 5, lines 35- 55; col. 7, lines 34- 67); suspending communication with said first radio network by said access terminal to communicate with a second radio network (col. 5, line 46- col. 6, line 21; col. 8, lines 1- 29); monitoring (RNC0 of figs. 13-14), at said access terminal, the time communication with

said first radio network is suspended while said access terminal is communicating with said second radio network(col. 13, line 31- col. 14, line 28; col. 16, lines 32- 67).

However, Ronnie et al does not specifically disclose the steps of transmitting a maximum suspension time from said first radio network to said access terminal; resuming communication by said access terminal with said first radio network using said previously established connection with said first radio network if the duration of suspended communication does not exceed said maximum suspension time; and requesting a new connection by said access terminal with said first radio network if the duration of suspended communication exceeds said maximum suspension time.

On the other hand, Virtanen, from the same field of endeavor, discloses a technique for re-establishing an interrupted data packet call on a channel between two transceiving devices in a telecommunications system. Information in the re-establishment message is used to retrieve the call configuration that was saved upon call release. The call is then re-established using the information in the re-establishment message and the retrieved information (col. 3, lines 40- 67; col. 4, lines 4- 67; col. 5, lines 1-15). Furthermore, Virtanen shows re-initiation of packet data transmission after the idle time expires and before the terminate time expires (figs. 3A-3C; col. 8, lines 22-56). In addition, the re-establish timer determines how long call configuration information is saved, without either the MS 10 or MSC 34 initiating re-establishment, after a call is released with a re-establishment possible indication in the call release message (col. 10, lines 23- 62).

Mustajarvi et al also discloses a method for updating a routing area in a packet radio network. When the packet radio node detects a routing area update carried out by an unknown

mobile station, it initiates the establishment of a logical link by sending a link establishment message (LLC) to the mobile station. Such LLC link parameters include the maximum delay of the acknowledgement response of a data frame, maximum number of retransmissions of a frame, maximum number of octets in the information field of a frame, and maximum number of sent unacknowledged frames (col. 5, lines 34- 64; col. 6, lines 13- 37; col. 8, lines 23- 37; col. 10, lines 15- 50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Mustajarvi to the modified system of Virtanen and Rinne in order to allow an interrupted packet data call to be re-established from either one of a pair of transceiving devices communicating in the packet data call.

Regarding claim 25, Rinne et al as modified discloses a method of managing radio network access in a radio network (figs. 3- 4 and fig. 6), comprising receiving a connection request at said first radio network from said access terminal to establish a new connection following termination of an earlier connection (col. 5, lines 14- 55; col. 8, lines 25- 51).

Regarding claim 26, Rinne et al as modified discloses a method of managing radio network access in a radio network (figs. 3- 4 and fig. 6), wherein said connection request transmitting by said access terminal to said first radio network includes a dropped call indication notifying said first radio network that said earlier connection with said access terminal was terminated (col. 8, lines 1- 51; col. 9, lines 11- 54).

Regarding claim 27, Rinne et al as modified discloses a method of managing radio network access in a radio network (figs. 3- 4 and fig. 6), comprising giving said access terminal priority access to said first radio network if said connection request includes a dropped call indication (col. 9, lines 7- 40; col. 10, lines 4- 36).

Regarding claim 28, Rinne et al as modified discloses a method of managing radio network access in a radio network (figs. 3- 4 and fig. 6), wherein said first radio network comprises an IS-856 radio network (col. 2, lines 34- 64).

Regarding claim 29, Rinne et al as modified discloses a method of managing radio network access in a radio network (figs. 3- 4 and fig. 6), wherein said second radio network comprises an IS-2000 radio network (fig. 3; col. 2, line 65- col. 3, line 41).

Regarding claims 30-31, Rinne et al discloses an access terminal comprising: a dual mode transceiver (fig. 3) for communicating with a first radio network in a first mode and a second radio network in a second mode (col. 2, line 65-col. 3, line 8; col. 5, lines 35- 55); a controller programmed to: establish (RNC and BS of fig. 4) communication with said first radio network in said first mode (col. 5, lines 35- 55; col. 7, lines 34- 67); suspend communication with said first radio network in said second mode (col. 5, line 46- col. 6, line 21; col. 8, lines 1- 29); maintain a timer (RNC0 of figs. 13-14) in said second mode to monitor the time communication with said first network is suspended (col. 13, line 31- col. 14, line 28; col. 16, lines 32- 67).

However, Ronnie et al does not specifically disclose the steps of resuming communication with said first radio network using said previously established connection with said first radio network if the duration of suspended communication does not exceed a maximum suspension time; requesting a new connection with said first radio network if the duration of suspended communication exceeds said maximum suspension time.

On the other hand, Virtanen, from the same field of endeavor, discloses a technique for re-establishing an interrupted data packet call on a channel between two transceiving devices in a

telecommunications system. Information in the re-establishment message is used to retrieve the call configuration that was saved upon call release. The call is then re-established using the information in the re-establishment message and the retrieved information (col. 3, lines 40- 67; col. 4, lines 4- 67; col. 5, lines 1-15). Furthermore, Virtanen shows re-initiation of packet data transmission after the idle time expires and before the terminate time expires (figs. 3A-3C; col. 8, lines 22-56). In addition, the re-establish timer determines how long call configuration information is saved, without either the MS 10 or MSC 34 initiating re-establishment, after a call is released with a re-establishment possible indication in the call release message (col. 10, lines 23- 62).

Mustajarvi et al also discloses a method for updating a routing area in a packet radio network. When the packet radio node detects a routing area update carried out by an unknown mobile station, it initiates the establishment of a logical link by sending a link establishment message (LLC) to the mobile station. Such LLC link parameters include the maximum delay of the acknowledgement response of a data frame, maximum number of retransmissions of a frame, maximum number of octets in the information field of a frame, and maximum number of sent unacknowledged frames (col. 5, lines 34- 64; col. 6, lines 13- 37; col. 8, lines 23- 37; col. 10, lines 15- 50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Mustajarvi to the modified system of Virtanen and Rinne in order to allow an interrupted packet data call to be re-established from either one of a pair of transceiving devices communicating in the packet data call.

Regarding claim 32, Rinne et al as modified discloses an access terminal comprising: a dual mode transceiver (fig. 3) wherein said connection request message includes a dropped call

indication to notify said first radio network that an earlier connection with said first radio network was terminated (col. 8, lines 1- 51; col. 10, lines 4- 36; col. 10, lines 57- 67).

Regarding claims 33-36, Rinne et al discloses radio network (figs. 3- 4 and fig. 8) comprising: a base transceiver station (fig. 4 and fig. 8) for communicating with an access terminal (col. 5,lines 35-55); a base station controller (fig. 4 and fig. 8) programmed to: establish a connection with said access terminal (col. 5, lines 35- 55; col. 7, lines 34- 67).

However, Ronnie et al does not specifically disclose the step of transmitting a maximum suspension time to said access terminal to indicate a maximum allowed suspension time before communication with said access terminal will be terminated.

On the other hand, Virtanen, from the same field of endeavor, discloses a technique for re-establishing an interrupted data packet call on a channel between two transceiving devices in a telecommunications system. Information in the re-establishment message is used to retrieve the call configuration that was saved upon call release. The call is then re-established using the information in the re-establishment message and the retrieved information (col. 3, lines 40- 67; col. 4, lines 4- 67; col. 5, lines 1-15). Furthermore, Virtanen shows re-initiation of packet data transmission after the idle time expires and before the terminate time expires (figs. 3A-3C; col. 8, lines 22-56). In addition, the re-establish timer determines how long call configuration information is saved, without either the MS 10 or MSC 34 initiating re-establishment, after a call is released with a re-establishment possible indication in the call release message (col. 10, lines 23- 62).

Mustajarvi et al also discloses a method for updating a routing area in a packet radio network. When the packet radio node detects a routing area update carried out by an unknown mobile station, it initiates the establishment of a logical link by sending a link establishment message (LLC) to the mobile station. Such LLC link parameters include the maximum delay of the acknowledgement response of a data frame, maximum number of retransmissions of a frame, maximum number of octets in the information field of a frame, and maximum number of sent unacknowledged frames (col. 5, lines 34- 64; col. 6, lines 13- 37; col. 8, lines 23- 37; col. 10, lines 15- 50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Mustajarvi to the modified system of Virtanen and Rinne in order to allow an interrupted packet data call to be re-established from either one of a pair of transceiving devices communicating in the packet data call.

Regarding claim 37, Rinne et al as modified discloses radio network wherein said base station controller (RNC of fig. 4of fig. 4) is further programmed to grant said access terminal priority access to said first radio network if an earlier established connection was terminated by said base station controller (fig. 7; col. 8, lines 14- 57; col. 10, lines 4- 36).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Haberman et al US Patent No 6240292 B1 discloses a method and system for providing a handoff from a CDMA cellular telephone system.

Hess et al US Patent No 5471670 discloses a method for determining communication resources handoffs.

Soliman US Patent No 6542743 B1 discloses a method and apparatus for conducting a pilot signal search in a wireless communication network.

Chen et al US Patent No 6553064 B1 discloses a method and apparatus for minimizing the amount of time that a mobile station is to be out of communication with an origination base station while searching for a suitable system to which to perform a mobile station assisted hard handoff.

Weaver, Jr et al US Patent No 5917811 discloses a method and apparatus for measurement directed hard handoff to determine a location of the remote unit based on the round trip delay corresponding to the first active communication signal and the candidate round trip delay.

Lee US Patent No 6253078 B1 discloses a method for paging a high-speed subscriber by roaming reservation in a radio paging switching system.

Talarmo US Patent No 5633913 discloses a method for establishing a connection between a first communication device, connected to a communication network and having at least one identity, and one or several second communication devices, connected to the communication network and located in a limited location area, each of them having a t least one identity.

Dent US Patent No 6553229 B1 discloses multi-mode cellular radiotelephones using a wide bandwidth-receiving mode while scanning for signals in a narrow bandwidth-receiving mode.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 703-306-3023. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 703-308-6739. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-305-9508 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

MARCEAU MILORD

Marceau Milord
Examiner
Art Unit 2682

July 24, 2003